ELECTRONIC THESIS AND DISSERTATION UNSYIAH

TITLE

UJI AKTIVITAS ANTIJAMUR EKSTRAK N-HEKSANA, ETIL ASETAT, DAN METANOL DAUN SEMBUNG (BLUMEA BALSAMIFERA (L.) DC)TERHADAP PERTUMBUHAN JAMUR CANDIDA ALBICANS RESISTEN FLUKONAZOL

ABSTRACT

ABSTRAK
Sembung (Blumea balsamifera (L.) DC) merupakan salah satu tumbuhan yang mempunyai aktivitas sebagai antijamur. Uji aktivitas antijamur ekstrak n-heksana, etil asetat, dan metanol daun sembung (Blumea balsamifera (L.) DC) terhadap Candida albicans yang resisten flukonazol telah dilakukan untuk mengetahui aktivitas antijamur ekstrak daun sembung dalam menghambat pertumbuhan jamur tersebut. Ekstraksi daun sembung dilakukan dengan metode maserasi bertingkat menggunakan pelarut n-heksana, etil asetat, dan metanol. Terhadap ekstrak
n-heksana, etil asetat, dan metanol dilakukan skrining fitokimia, karakterisasi ekstrak, dan uji aktivitas antijamur. Uji aktivitas antijamur terhadap C. albicans resisten flukonazol ketiga ekstrak dilakukan menggunakan metode Kirby-Bauer dengan variasi konsentrasi ekstrak yaitu 5, 10, 15, dan 20%. Hasil skrining fitokimia menunjukkan bahwa ekstrak n-heksana mengandung senyawa steroid. Sedangkan ekstrak etil asetat mengandung senyawa akaloid, flavonoid, dan steroid. Pada ekstrak metanol mengandung senyawa alkaloid, flavonoid, tanin, saponin, dan steroid. Hasil karakterisasi terhadap ekstrak n-heksana menunjukkan kadar air sebesar 19,78%, kadar sari larut air dan etanol masing-masing 8,2% dan 53%, serta kadar abu total sebesar 0,17%. Ekstrak etil asetat menunjukkan kadar air sebesar 21,21%, kadar sari larut air dan etanol masing-masing 10,7% dan 70%, serta kadar abu total 0,19%. Ekstrak metanol mengandung kadar air sebesar 13,55%, kadar sari larut air 49,7%, kadar sari larut etanol 72,6%, serta kadar abu total 7,1%. Hasil uji aktivitas antijamur menunjukkan bahwa ekstrak n-heksana, etil asetat, dan metanol daun sembung tidak dapat menghambat pertumbuhan jamur Candida albicans yang resisten flukonazol.

Kata kunci: Daun sembung (Blumea balsamifera (L.) DC), Candida albicans resisten flukonazol, metode Kirby-Bauer.

ABSTRACT

Sambong (Blumea balsamifera (L.) DC) is one of the plants that has activity as an antifungal. The antifungal activity test of n-hexane extract, ethyl acetate, and methanol of the sambong leaf (Blumea balsamifera (L.) DC) against fluconazole resistant Candida albicans has been done to determine the antifungal activity of leaf extract inhibiting the growth of the fungus. The extraction of the sambong leaf was performed by solvent multistep maceration method using n-hexane, ethyl acetate, and methanol. Phytochemical screening, extract characterization, and antifungal activity tests of the extract n-hexane, ethyl acetate, and methanol have been done. The extracts was test by antifungal activity test on fluconazole resistant Candida albicans using Kirby-Bauer method with variation concentration of each extract 5, 10, 15, and 20%. The results of phytochemical screening showed that n-hexane extracts contained steroid compounds. While ethyl acetate extract contains a compound of alkaloid, flavonoids, and steroids. In the extract methanol contains alkaloid compounds, flavonoids, tannins, saponins, and steroids. The characterization of n-hexane extract showed water content of 19.78%, water soluble and ethanol content of 8.2% and 53%, and total ash content of 0.17%. Ethyl acetate extract showed water content of 21.21%, water soluble and ethanol content 10.7% and 70%, and total ash content of 0.19%. Methanol extract contains water content of 13.55%, water soluble 49,7%, ethanol soluble extract 72,6%, and total ash content 7,1%. The results of the antifungal activity test showed that the n-hexane, ethyl acetate, and methanol of sambong leaf extracts can not inhibit the growth of the fluconazole resistant Candida albicans.

Keywords: Sambong leaf (Blumea balsamifera (L.) DC), Candida albicans, Kirby-Bauer method.